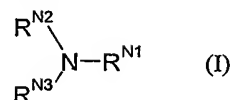


Claims

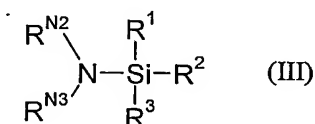
1. A method of synthesising a compound of formula I:



5 comprising the step of reacting a moiety of formula II:



with a moiety of formula III:



in compressed carbon dioxide in the presence of a transition
 10 metal catalyst and a base, wherein:
 L is a labile leaving group;
 $\text{R}^{\text{N}1}$ is optionally substituted C_{5-20} aryl;
 $\text{R}^{\text{N}2}$ is selected from optionally substituted C_{5-20} aryl, optionally
 substituted C_{3-20} heterocyclyl, optionally substituted C_{3-7} alkyl,
 15 and optionally substituted sulfonyl;
 $\text{R}^{\text{N}3}$ is selected from H and optionally substituted C_{1-7} alkyl, C_{3-20}
 heterocyclyl and C_{5-20} aryl; or
 $\text{R}^{\text{N}2}$ and $\text{R}^{\text{N}3}$ together with the nitrogen atom to which they are
 attached form optionally substituted nitrogen-containing C_{3-20}
 20 heterocyclyl or C_{5-20} heteroaryl; and
 R^1 , R^2 and R^3 are independently selected from optionally
 substituted C_{1-7} alkyl, C_{5-20} aryl, C_{3-20} heterocyclyl, hydroxy,
 halo, amino and C_{1-7} alkoxy, or two of R^1 , R^2 and R^3 , together
 25 with the silicon atom to which they are attached, may form a
 silicon containing C_{5-7} heterocyclyl group.

2. A method according to claim 1, wherein the compressed
 carbon dioxide is supercritical carbon dioxide.

30 3. A method according to claim 1 or claim 2, wherein the
 transition metal catalyst is a palladium catalyst.

4. A method according to claim 3, wherein the palladium catalyst comprises one or more phosphine ligands.
5. A method according to any one of claims 1 to 4, wherein the base is selected from group 1 metal carbonate and tert-butoxy/phenoxy bases.
6. A method according to claim 6, wherein the base is Cs_2CO_3 .
7. A method according to any one of claims 1 to 6, wherein a fluoride source is present.
8. A method according to claim 7, wherein the fluoride source is selected from KF and CsF.
9. A method according to any one of claims 1 to 8, wherein the reaction is carried out at a temperature of between 20 and 200°C.
10. A method according to any one of claims 1 to 9, wherein the labile leaving group is selected from I, Br, Cl and OSO_2CF_3 .
11. A method according to any one of claims 1 to 10, wherein $\text{R}^{\text{N}2}$ is selected from optionally substituted C_{5-20} aryl, optionally substituted C_{5-20} heterocyclyl, and optionally substituted sulfonyl.
12. A method according to any one of claims 1 to 11, wherein $\text{R}^{\text{N}3}$ is selected from optionally substituted C_{1-7} alkyl, C_{3-20} heterocyclyl and C_{5-20} aryl.
13. A method according to any one of claims 1 to 12, wherein R^1 , R^2 and R^3 are independently selected from optionally substituted C_{1-7} alkyl, C_{5-20} aryl, C_{3-20} heterocyclyl and C_{1-7} alkoxy, or two of R^1 , R^2 and R^3 , together with the silicon atom

to which they are attached, may form a silicon containing C₅₋₇ heterocyclyl group.